

**Access to Microfinance & Improved Implementation of Policy Reform
(AMIR Program)**

Funded By U.S. Agency for International Development

Information Technology Parks

Draft Report

**Deliverable for Policy Component
Task 4.6.17**

Contract No. 278-C-00-98-00029-00

August 23, 2000

This report was prepared by Dinyar Lalkaka, Consultant, for Chemonics International Inc., prime contractor to the U.S. Agency for International Development for the AMIR Program in Jordan.

Acknowledgements

Many individuals contributed to the success of this consultancy. A list of persons met is included as Annex 2. I would like to take this opportunity to thank all of them for their help. Special thanks are due to Ms. Heather Belmosto, Chemonics; Mr. Ra'ed Bilbessi, int@j; Mr. Ramzi Kavar, REACH; Mr. Marwan Juma, REACH; Ms. Rana Bin Tarif, International Business Legal Associates; and Ms. Evon Warwar, AMIR.

Table of Contents

Executive Summary	1
Background	2
Technology Parks	2
Technology Incubators	4
Annex 1: Itinerary.....	8
Annex 2: Persons Met	9
Annex 3: Seminar.....	10
Annex 4: Legal Issues	10
Legal Report:	11

Executive Summary

This report is based on a four day consulting assignment in Amman, Jordan, from August 20 to August 24, 2000. The purpose of the assignment was to advise on the potential ability of *information technology (IT) parks* to contribute to the development a dynamic IT sector in Jordan.

It was concluded that IT parks were not well suited to the specific needs of the IT sector in Jordan at present. This is because: first, there is a lack of market demand for them; second, suitable sponsors/developers of IT parks are lacking; and third, IT parks are not well suited to the current developmental needs of IT firms in Jordan.

Two parks are currently under discussion. While they may be worthy of support, neither can legitimately be called an IT park.

Alternative means, such as zoning regulations and IT-enabled buildings, are available to address the locational needs of mid-sized IT firms in Jordan at lower cost and risk.

The fundamental need of the IT sector is to foster the development of a growing number of entrepreneurial IT startups. IT incubators may represent on means to this end, especially if they are part of a coordinated strategy designed for this purpose. Unlike IT parks, incubators emphasize business support services rather than physical infrastructure. They are cheaper and more likely to have an impact on the growth of the IT sector than parks.

It is recommended that the feasibility of establishing one or more new IT incubators be examined as part of the REACH Program. Initially it may be advisable to focus on not-for-profit incubators, established in a public-private partnership between an academic institution and private business. The ability to acquire a suitable building on favorable terms would facilitate the financial viability of a prospective incubator. Although it is unlikely that a non-profit incubator would be able to pay of the initial investment in the required physical facilities, it can and should be required to break even on an operational basis.

New models of for-profit incubation, closely related to venture capital, are now emerging, and are already being implemented in some developing countries. These models are also likely to be relevant to Jordan, especially as and when international venture capital practices become established.

Background

This consultancy was sponsored by Chemonics International Inc., prime contractor to the U.S. Agency for International Development for the Access to Microfinance and Improved Implementation of Policy Reform (AMIR) Program in Jordan. The AMIR Program is intended to assist the private sector and the Government of Jordan in responding to the economic challenges of accelerating economic growth and the pace of employment creation. The specific challenge addressed by the consultancy was to examine and advise on the potential role of *information technology (IT) parks* in the context of the REACH Initiative to develop a dynamic IT sector in Jordan.

The consultant was in Jordan from August 19 to August 25, 2000, with consultancy activities scheduled from August 20 to August 24, 2000. Thanks to the excellent advance arrangements made by the AMIR office, all activities proceeded according to plan. The itinerary for the consultancy is presented in Annex 1.

A press release on the consultancy was developed in cooperation with the public relations staff of the AMIR Program and published in a local paper.

The consultant's summary recommendations were presented to and received well by the Business Association Initiative ("BAI") Committee of the REACH 2.0 Program. A workshop on the subject of IT parks and IT incubators was attended by an audience of about 50 persons and met with an enthusiastic response.

Technology Parks

While the concept of an IT park has many attractive features, it is the view of this consultancy that in practice it is not well suited to the specific needs of the IT sector in Jordan at the present time. This is especially true if by the "IT sector" we refer primarily to the needs of software and service firms, the primary focus of the REACH Initiative, and if by "IT Park" we mean a spread out, campus-style development as opposed to a single building. There are three reasons for this negative recommendation.

First, there is a *likely lack of market demand*. There are at present a limited number of Jordanian software firms that could serve as potential tenants in a prospective park – perhaps a dozen at best. This point was noted in *The Reach Initiative* document (p. 36). As further noted in the Annex (p. C-7), existing firms appear unlikely to forsake their investments in office space and facilities in order to move to a new park development.

Second, *suitable sponsors/developers are likely to be lacking*. An IT park in the true sense of the term requires a sizable financial investment, probably in excess of \$10 million. It also typically requires a fairly long period of time before it can realize its full economic potential. Private developers are unlikely to be willing to proceed with such a project in the absence of clearly established market demand, or strong government incentives. Government should not rush in where private developers fear to tread, especially since there are likely to be, as suggested later in this report, other more cost-effective means of attaining similar objectives.

Two parks are currently being mooted, one in Irbed by Boscan, a Chinese-backed conglomerate whose primary business is luggage manufacture, and one in Zarqa by Hillwood, a U.S. real estate developer. Both parks hope to attract IT firms. Both also hope to establish links with neighboring universities –The Jordan University of Science and Technology in the case of Boscan, and Hashemiya University in the case of Hillwood. Finally, both Boscan and Hillwood believe that the prospective availability of high-speed connectivity and “QIZ” (Qualified Industrial Zone) status (which would allow for duty-free imports and exports) would constitute the primary basis of their appeal to software firms. (To date, neither Boscan nor Hillwood have received firm commitments on either QIZ status or the availability of high-speed connectivity, though both expect to receive such commitments soon.)

In fact, it is hard to see QIZ status having much relevance to Jordanian software firms, which enjoy most of the benefits of duty-free import and export even without QIZ. High speed connectivity would be a significant plus only if it were not available elsewhere, or available at a much lower cost in the parks. The location of the parks, far from Amman, and, for the most part, a suitable labor force, are further disadvantages. Neither developer has undertaken market studies of the prospective demand by software or other IT firms for space in their parks. Plans for neither park call for the range of amenities typically associated with an IT park. Finally, neither developer has any prior experience with IT parks.

Both Boscan and Hillwood expect their primary market to consist of light industrial manufacturing. In that they may increase the range of potential locational choices for IT firms, both parks may be able to make a positive contribution to the development of the IT industry in Jordan. However, short of major changes in their current development objectives, both parks are best viewed as general purpose industrial parks and not as IT parks.

Third, *IT parks are arguably not well suited to the current developmental needs of IT firms in Jordan*. In the view of this consultancy, Jordan’s needs vis-à-vis “managed workspaces” – the general category to which IT parks belong – are better served by alternative models. IT parks typically cater to the needs of established, medium to large sized firms. The locational needs of such firms can be met by less ambitious and costly schemes.

Industrial clustering, where firms in a given industry locate in close proximity to one another, is often a desirable objective. This can be encouraged by mechanisms such as zoning regulations. The availability of high-tech workspace – with high speed network connectivity, suitable utility specifications, flexibly configurable space, etc. – is often a constraint to the expansion of software firms. The construction of an “intelligent building” by a private developer, possibly with an organization such as int@j, the IT industry association, serving as an anchor tenant, could represent a practical and market-oriented solution to this need. Indeed, such buildings need not be custom-built. One of the hottest real estate trends in both developed and advanced developing countries today is the conversion of industrial and warehouse space for use by IT firms.

Successful development of the Jordanian IT sector ultimately depends on the emergence of dynamic cohorts of entrepreneurial IT startups. Firms such as these are better served by *technology business incubators*, which place as much or more emphasis on support services such as business consulting, training and venture finance as they do on the provision of physical workspace. In addition to being more relevant to Jordan’s needs, IT incubators typically cost less than IT parks and realize their economic potential more quickly.

While this consultancy recommends that IT parks are not well suited to the current needs of Jordan’s IT sector, it should be noted that the outlook could be quite different in a few years. Should, for example, it be possible to induce a major international IT firm to establish a regional research or development facility in Jordan, or should a Jordanian firm or firms grow rapidly to regional or world-class status, this could well serve as a nucleus around which to build a dynamic IT park.

Technology Incubators

During the course of this consultancy, several knowledgeable observers of the IT sector in Jordan expressed the view that Jordan needs more entrepreneurs to create new IT businesses. The current membership of int@j is about 50 mid to mostly small sized firms. An internationally competitive IT industry cannot be built on this foundation alone. Without adequate “density”, IT in Jordan will remain trapped in a sub-critical orbit.

Technology business incubators are not a magic bullet that alone can significantly deepen the ranks of Jordanian IT firms. However, incubators may have a role as one element in an integrated strategy for the promotion of technological entrepreneurship. It is recommended that a feasibility study for the establishment of one or more non-profit incubators be included in the REACH Program.

According to the U.S. National Business Incubation Association, “Incubators are business assistance programs targeted to support fledgling entrepreneurial firms, and are proven tools for encouraging technology transfer, revitalizing communities and creating jobs... Incubators offer assistance that typically includes flexible space; exposure to a network of business and technical consultants, often providing accounting, legal, marketing, and engineering advice; relationships with financial institutions; access to university resources and business opportunities.” (Source: www.nbia.org)

Unlike other managed workspaces such as parks, firms have a finite tenure in an incubator, typically two to three years. Entry is by application, with admission granted only to those firms deemed most likely to succeed and benefit from incubation. Once incubated, firms either rapidly outgrow their need for the incubator’s support, or fail and therefore no longer need support. A third group of firms neither succeeds nor fails; such firms are typically required to move on after a given period. This characteristic, coupled with the fact that the space requirements of startup firms are limited, means that incubators can serve a much larger number of firms per unit area than can, say, parks.

Jordan already has two incubators, one sponsored by the Jordan Technology Group and catering exclusively to technology startups, and another sponsored by a women’s group and serving the needs of women entrepreneurs. Both incubators appear to be well managed although lacking in resources. Thus, incubator management experience already exists in Jordan, and should be replicable. Consideration should be given to building on the successes of both these incubators and learning from their failures. It is worth noting, in passing, that women constitute an important part of the IT workforce in many developing countries.

During the course of this consultancy, representatives of several organizations, mostly banks, indicated that they were already serious considering the idea of establishing technology incubators. Sponsorship of incubators by banks is not common, but neither would it be unprecedented. The potential benefits of an incubator accrue not only to incubator tenants; sponsors, including those in the private sector, also stand to benefit. Such benefits can include:

For Tenants	For Gov’t & University Sponsors	For Private Sector Sponsors
Enhances their chances of success	Creates jobs, incomes, taxes and exports	Meets social responsibility
Raises credibility and visibility	Promotes economic growth and regional development	Provides means for spinning off small units from large enterprises
Improves management skills	Raises technical and quality level of startup firms	Develops new sources of demand and for outsourcing goods/services
Provides better access to contacts and information	Interactions between university-research-industry	Creates opportunities for acquiring innovations and making investments
Creates synergy among tenants	Creates sustainable indigenous capacity to replicate incubators	For venture capitalists, enhances the success rates of their investments
Reduces gestation time and costs	Promotes an entrepreneurial culture	For real estate developers, etc., can be profitable

Typically, incubators are established by some form of public-private partnership and run as non-profit organizations. In the Jordanian context, a reputable university with a strong IT department or an organization such as the Royal Scientific Society would on the face of it make a good sponsor. Ideally, such a sponsor would establish close ties or work in partnership with the private sector, represented perhaps by a bank or a professional association such as int@j.

It was reported that Jordanian universities are not strong in research or in commercializing the results of research. While in the short run this might militate against the effectiveness of a university-sponsored incubator, the incubator could potentially serve as a catalyst for closer ties between academia and business.

Acquisition of an underutilized building on favorable terms – ideally for free – would be an important step in ensuring the financial viability of an incubator. A prospective incubator building should have a minimum of 1,000 sq. m. of net space; 2,000 sq. m. or more would be better. Additional desirable features include a central location with convenient access, a layout with the ability to flexibly configure common services and modular workspace, clear title and ability to effect prompt transfer of title to incubator, and good state of repair in order to reduce renovation and operating costs.

No matter who the sponsor, even a non-profit incubator should be run on an entrepreneurial, market-oriented basis, in short, as a business. While non-profit incubators typically need not, indeed should not, be required to amortize the initial investment in the incubator facility, they *should* be required to break even on an operational basis, with income from rent and service fees covering costs of staff, property management, etc. As a startup serving startups, the incubator should mimic the dynamism of entrepreneurial businesses, and strive for financial self-reliance.

As with any business, the success or failure of an incubator is often a reflection of the quality of its Board of Directors and its Manager. Incubator boards should involve all major stakeholders in the community and should serve to set the strategic priorities of the incubator. They should *not* be involved in day-to-day management. That should be the prerogative of a strong incubator manager with entrepreneurial experience who can lead and inspire incubated entrepreneurs by his personal example.

It has become increasingly common for incubators to take small equity stakes of anywhere from 2-20% in tenant companies as a condition of admission or in partial payment of incubator fees. This practice has much to recommend it as it more closely aligns the interests of incubator and incubatee, provides a significant potential upside for the incubator in the event that an incubatee should be highly successful (e.g., go public), and serves as a stepping stone to emerging models of private, for-profit incubation.

Mention should also be made of “virtual incubation”, where incubation services are provided over the Internet, in the absence of, or in addition to, incubation in a physical facility. “Online small business centers”, a variant of this model, allow entrepreneurs to concentrate on growing their business while outsourcing routine administrative tasks to an online service. While virtual incubation allows outreach to a much broader target audience, virtual interaction is no real substitute for personal contact. And online small business services work best with broadband, “always-on” connectivity. Nevertheless, these approaches may deserve to be experimented with in Jordan, and could serve as a means for an IT-savvy organization such as int@j to add value to its members.

After experience has been gained with the conventional model of non-profit incubation and as the venture capital industry and the legal and institutional framework that it presupposes matures, additional incubators could be established according to the emerging model of for-profit, IT incubators. These incubators, which represent the current state of the incubator art, are sponsored by private firms, often by venture capitalists, and seek to realize equity appreciation by investing cash and/or incubation services in client companies. Client companies are typically Internet firms, but can include any technology firm with the potential to go from concept to market in a reasonably short period. Many developing countries, including India, China, Thailand, Brazil and Argentina, have established for-profit IT incubators, and the model will undoubtedly be of relevance to Jordan in the next few years. Jordan would be well advised, however, to first accumulate additional experience with conventional, not-for-profit business incubation.

Annex 1: Itinerary

Saturday, August 19, 2000:

08:25 p.m. Arrive in Amman, Jordan

Sunday, August 20, 2000:

09:30 a.m. – 12:00 p.m. Meetings at AMIR office

12:30 p.m. – 02:30 p.m. Lunch with select members of REACH 2.0 BAI Committee

03:00 p.m. – 05:00 p.m. “Pre-Meeting” with all members of REACH 2.0 BAI Committee

Monday, August 21, 2000:

09:00 a.m. – 03:00 p.m. Stakeholder interviews

- Boscan
- Hillwood
- Export & Finance Bank
- Jordan Technology Group
- Jordan Investment Board

05:00 p.m. – 07:00 p.m. Presentation and workshop on IT parks and incubators

Tuesday, August 22, 2000:

09:30 a.m. – 01:00 pm Discussion of Legal Issues

01:30 p.m. – 02:30 p.m. Interview with Jordan Venture Projects

Wednesday, August 23, 2000

All day Report writing

Thursday, August 24, 2000

08:00 a.m. – 09:00 a.m. Meeting with Mr. Stephen Wade, AMIR Program Director

01:25 p.m. Depart from Amman, Jordan

Annex 2: Persons Met

Attendees	Meeting Time	Meeting with	Company
Dinyar Lalkaka + Bilal Abu Zeid	09:30 am - 10:30 am	Mr. Sami Mqatash	Bosican
Dinyar Lalkaka + Bilal Abu Zeid	10:50 am - 11:45 am	Ms. Sahar Aloul	Hillwood
Dinyar Lalkaka + Bilal Abu Zeid	12:00 pm - 01:00 pm	Mr. Ali El Hussari	Export & Finance Bank
Dinyar Lalkaka + Bilal Abu Zeid	01:10 pm - 01:50 pm	Mr. Moh'd Masa'deh	Jordan Technology Group
Dinyar Lalkaka + Bilal Abu Zeid	02:00 pm - 02:30 pm	Mrs. Reem Badran	JIB
Dinyar Lalkaka + IBL	All Day	IB law office	IB law office

Annex 3: Seminar

A workshop was conducted on Monday, August 21, 2000, from 5 to 7 p.m. A one hour presentation was made by the consultant, covering both IT parks and IT incubators, and their relevance to the development of the IT sector in Jordan. The presentation was followed by a one-hour question and answer period. A digital copy of the PowerPoint presentation was left with Ms. Evon Warwar of the AMIR staff.

Annex 4: Legal Issues

A number of potential legal issues relating to the prospective implementation of technology incubators in Jordan were discussed with Ms. Rana Bin Tarif of International Business Legal Associates. These included:

- Legal status and tax liabilities of a non-profit incubator
- Legal status of the relationship between incubator and incubatee
- Tenancy laws and their impact on the incubator-incubatee relationship
- Legal and policy restrictions on the participation of university faculty in private business ventures
- Legal implications of taking equity in incubated firms in lieu of fees for services
- Exit mechanisms for incubators and venture capitalists

Technology Parks and Incubators

Legal report

Prepared by

International Business Legal Associated
(IBLaw)

Should the incubator take the form of a “non-profit company”?	<p>Not advisable for private investors because :</p> <p>1- non profit companies are prohibited from distributing profits to shareholders.</p> <p>2- There are no tax exemptions granted to non-profit companies.</p> <p>3- inability to distribute profits is a barrier to investors who want to distribute profits.</p>		Establish the incubator as a normal company.
What kind of government assistance could be given?	<p>Investment Promotion Law, Article 3/f :</p> <p>The Council of Ministers may approve new sectors to enjoy exemptions under this law.</p>		Seek a decision by the Council of Ministers to make incubators eligible to enjoy all benefits under the Investment Promotion Law.

<p>What is the impact of tenancy laws on the relation between the incubator and incubatee on the one hand and the incubator and owner from the other.</p>	<p>Civil Code , (675-707) Subleasing is subject to the contract terms, therefore, an incubatee shall evict when the duration agreed upon by parties in the contract expires.</p> <p>“Amendment Law for Landlords and Tenants”, Article 5/B: this law has been amended very recently so that a lease must evict upon expiration of the contract .</p>	<p>In favor since the leasing and subleasing contracts are totally subject to the terms agreed by parties.</p> <p>Therefore , the new amendment to the Tenants and Landlord Law subject the contracts to the freedom of contracting which means :</p> <p>1) the leasing contract will expires at the time agreed by the parties.</p> <p>2) renewal could be conditioned upon raise in rent.</p>	
<p>Could universities (public & private) cooperate with incubators?</p>	<p>Universities Law, Higher Education Law: There is no legal constraint on universities to cooperate with incubators.</p>	<p>In favor.</p>	

<p>Taking equity in incubated companies in exchange for providing services.</p>	<p>Companies Act / Limited Liability Companies, Article 58: The Controller shall have the right to ask for a proof of the accuracy of the evaluation of the value of the shares in kind.</p> <p>Companies Act /public shareholding companies, Article 109: The Minister, upon the recommendation of the Controller, may ascertain the authenticity of evaluation of the payments in kind in the manner he deems proper or by forming a committee of experts and at the expense of the company.</p>	<p>Restrictive because:</p> <p>a) The Minister/ Controller interference in the evaluation of in kind capital, although the founders /shareholders agree on such valuation, is against forces of free market.</p> <p>b) The Minister may refuse to register the company if the founders oppose the valuation of the committee, which is formed by the Minister.</p> <p>c) the criteria for approving the evaluation is not stated and therefore arbitrary decision are most likely to occur.</p> <p>d) it is not clear if “services” could be considered in kind capital.</p>	<p>Change Article 58 & 109 so that:</p> <p>a) evaluation of in kind capital is left to founders/shareholders to decide on without any further approval from the Controller or any Committees appointed by him.</p> <p>b) define expressly what is considered “capital in kind” to include “services” “consultations” etc. , so as not to leave room for a case by case interpretation by Controller.</p>
--	---	--	--

Should incubated companies pay “vocational licenses” to the municipality during their incubation?	Vocational Licenses Law, Article (3): Every company has to pay a vocational fee before conducting a profession. Such license expires yearly and a fee is paid for each renewal.	Constitute a barrier to entry because: 1) These fees add more start up costs on incubated companies. 2) Consideration should be given to those companies since they are not selling yet, they are still in the phase where they are doing research and development, planning and training.	Amend this Article so that incubated companies will be given a grace period wherein they do not need to pay such fees until they have sales.
--	--	--	--